

ABSTRACT

A signal under measurement is band-limited, and frequency components around a fundamental frequency of the signal under measurement are extracted. Waveform data (approximated zero-crossing data) close to zero-crossing timings of the band-limited signal are sampled, and phase error data between the approximated zero-crossing points and the corresponding zero-crossing points of the signal under measurement are calculated from the approximated zero-crossing data to obtain a zero-crossing phase error data sequence $\delta[k]$. Then an instantaneous period sequence $T(k)$ of the signal under measurement is obtained from the zero-crossing phase error data and sampling intervals $T_{k,k+1}$ of the approximated zero-crossing data sequence. Then a period jitter sequence is obtained from differences between the $T(k)$ and a fundamental period T_0 of the signal under measurement, and then the period jitter sequence is multiplied by $T_0/T_{k,k+1}$ to correct the period jitter sequence.